

CLAIMS

1. A method of operating a computer network server in a network having a central node and wherein said network comprises at least one client authorized to access said computer network server via said central node, said method comprising:

accessing said central node;

obtaining the network addresses of said at least one client;

establishing a computer network connection with said at least one client;

receiving a request from said at least one client over said established connection; and

responding to said request.

2. The method of claim 1, further comprising providing a network device, said network device being selected from the group consisting of firewalls, proxy servers, and network translation devices, said network device being in the path between said server and said network.

3. A method of operating a computer network server in a computer network having a central node wherein said network comprises at least one client authorized to access said server, wherein said server has a listening port, accessible during a predetermined time, comprising:

maintaining a connection with a central node;

receiving a command from said central node to open a listening port after said central node receives a request from said at least one client to access said server;

opening said listening port;

sending to said central node instructions for said client to connect to said server over said listening port; and

receiving communication from said client over said listening port after said central node delivers a command to said at least one client to connect to said server.

4. The method of claim 3, whereby said predetermined time is less than one second.

5. The method of claim 3, whereby said server closes said listening port after receipt of said communication.

6. The method of claim 3, whereby said server establishes a network connection with said client after receipt of said communication.

7. The method of claim 3, whereby said server closes said listening port if it receives communication from other than said at least one client.

8. The method of claim 3, whereby said server maintains a persistent network connection to said central node.

9. The method of claim 3, whereby said command is encrypted.

10. The method of claim 3, whereby said instructions are encrypted.

11. The method of claim 3, whereby said communication is encrypted.

12. A method of sharing data between a server and at least one client authorized to access said data resident on said server on a network using network connections, whereby all said network connections between said server and said at least one client are initiated by said server.

13. The method of claim 12, further comprising a central node, whereby said server requests from said central node a list of said at least one clients authorized to access data resident on said server.

14. The method of claim 13, whereby said request is encrypted.

15. The method of claim 13, whereby said server initiates a network connection to each of said at least one authorized clients.

16. The method of claim 15, whereby said at least one authorized client requests data from said server using said network connection previously initiated by said server.

17. A computer system, comprising a central node, a server and at least one authorized client, wherein said server is adapted to access said central node to obtain a list of said clients authorized to access data on said server.

18. The computer system of claim 17, wherein said server is adapted to establish a network connection to each said at least one authorized client.

19. The computer system of claim 18, wherein said server is adapted to receive a request over said established network connection from said at least one client and is adapted to respond to said request.

20. A computer system, comprising a central node, a server and at least one authorized client, wherein said server is adapted to receive notification from said central node that said authorized client wishes to communicate with said server and in response to said notification, is adapted to open a listening port for said authorized client to connect to and sends instructions to said central node to notify said authorized client to communicate to said listening port.

21. The computer system of claim 20, wherein said server is adapted to close said listening port if a device other than said authorized client attempts to communicate to said listening port.

22. The computer system of claim 20, wherein said server is adapted to establish a network connection with said authorized client after said authorized client communicates to said listening port.

23. The computer system of claim 20, wherein said server is adapted close said listening port after receipt of said communication from said authorized client.

24. A computer program product for instructing a processor in a computer network server in a network having a central node and wherein said network comprises at least one client

authorized to access said computer network server via said central node, said computer program product comprising:

a computer readable medium;

first program instruction means for accessing said central node;

second program instruction means for obtaining the network addresses of said at least one client;

third program instruction means for establishing a computer network connection with said at least one client;

fourth program instruction means for receiving a request from said at least one client over said established connection and responding to said request.

25. A computer program product for instructing a processor of a computer network server in a computer network having a central node wherein said network comprises at least one client authorized to access said server, wherein said server has a listening port, accessible during a predetermined time, said computer program comprising:

a computer readable medium;

first program instruction means for maintaining a connection with a central node;

second program instruction means for receiving a command from said central node to open a listening port after said central node receives a request from said at least one client to access said server;

third program instruction means for opening said listening port;

fourth program instruction means for sending to said central node instructions for said client to connect to said server over said listening port; and

fifth program instruction means for receiving communication from said client over said listening port after said central node delivers a command to said at least one client to connect to said server.